An overview of FRHS' Research activities during 2019-2020

Annual Report 2019-2020

Foundation for Research in Health Systems (FRHS)



August 2020

INDEX

List of abbreviations	03
From the President's Desk	04
Current membership of governing council	05
Executive summary	06
Sector development in healthcare	
Background	15
Annual Research Activities: Consolidated table 1	14
Projects' descriptions with major outcomes:	
Externally funded projects	
Projects with FRHS funding	
Current membership of Research Advisory Board- FRHS	
Current membership of Ethical Review Board -FRHS	
FRHS Publications/Conferences/workshops/working papers	
FRHS Staff Members: Apr 2019 Mar 2020	23
FRHS Interns Apr 2019- Mar 2020	
Project Staff: Apr 2019- Mar 2020	24
Staff status over 2017- 2020	27
Revenue and Expenditures 2017-20	
Asset composition 2017-18; 2018-19 and 2019-20	
Conclusion	29

LIST OF ABBREVIATIONS

AWWs	Anganwadi Workers
ANMs	Auxiliary Nurses and Midwives
ECCE	Early Childhood Care and Education
FRHS	Foundation for Research in Health Systems
GoI	Government of India
ICM	International Confederation of Midwives
IIITB	Indian Institute of Information Technology- Bangalore
IITB	Indian Institute of Technology- Bombay
IIPHG	Indian Institute of Public Health- Gandhinagar
SEAR	South-East Asia Region
UNICEF	United Nations' Children's Fund (Previously called United Nations International Children's Emergency Fund)
UNFPA	United Nations' Population Fund
WHO	World Health Organization

Name	Title	Email	Location	Contact Number
Prof. Krishna S.	President- FRHS	skrishna123@gmail.com	Bengaluru	9742221342 (M)
Prof. Nirmala Murthy	Founder Member	murthy.nirmala@gmail.com nmurthy@frhsindia.org	Bengaluru	9448116094 (M)
Mr. R. C. Chib	Founder Member	chib.rc@gmail.com	New Delhi	9825353842 (M)
Dr. Leela Visaria	Member	lvisaria@gmail.com	Ahmedabad	9898022433 (M)
Dr. P. M. Shingi*	Member	pmshingi@gmail.com	Raipur	8959888800 (M)
Dr. P. S. S. Sundar Rao	Member	pamidipanisundarrao@gmail.co m	Bengaluru	8861365237 (M)
Ms. Usha Raghunath	Member	usharaghunath@gmail.com	Bengaluru	8197291755 (M)
Dr. Sateesh V. L.	Member	dr.sateesh14@rediffmail.com	Bengaluru	9449061651 (M)
Dr. M. Prakasamma	Member	m.prakasamma@gmail.com	Hyderabad	9440065707 (M)

CURRENT MEMBERSHIP OF THE GOVERNING COUNCIL

(M) – Mobile Number

* FRHS GC member Professor P. M. Shingi passed away from natural causes in August 2020. Professor Shingi leaves behind a great legacy. He was a PhD-holder from University of Illinois, USA, and served as a Professor at Indian Institute of Management- Ahmedabad for over 3 decades. Professor Shingi completed more than 40 management consulting assignments on policy and program related aspects for the Government of India, USAID, Ford Foundation, OXFAM, United Nations, Research Institute for Social Development, the World Bank and many others. He has also published several books, research monographs, consultancy monographs, and research articles for national and international journals. Professor Shingi always offered advice to FRHS researcher seeking his guidance. His benevolence and expertise will be greatly missed by FRHS Team. May he rest in peace.

EXECUTIVE SUMMARY

Foundation for Research in Health Systems (FRHS), a not-for-profit research organization was founded in the year February, 1989. FRHS is registered in New Delhi, under the Societies Registration Act 1860 with the administrative headquarter located in Bengaluru, while undertaking projects across India.

In 2019-2020, FRHS' activities continued in line with the vision and Mission of the Foundation. The key FRHS projects during the year – both externally funded and funded by FRHS – included Health Needs Assessment and Health Seeking Behaviour related to MCH and NCD in Majuli, Assam, , testing mSakhi app's utility for ASHA workers in delivering Child and Adolescent health and Nutrition services); Evaluation of Civil Registration system in Rajasthan, and measuring competencies of midwifery educators and clinical midwives. In addition, FRHS developed an eLearning module for promoting infection control, hygiene and sanitation in hospital setting); designed a survey-viz tool for visualization of survey data and Digitized FRHS' Health Monitor data set to facilitate dashboards generations that health managers can use).

FRHS submitted a joint proposal for a seed grant by UK Medical Research Council on behalf of the consortium for evaluating quality of Midwifery Services in two Indian states. The project implementation would have started from April 2020, but was delayed due to the Pandemic COVID-19.

During 2019-2020, FRHS received research grants amounting to about INR 2.12 crores), for conducting research activities in more than 85 districts across eight Indian states. The major research activities undertaken during 2019-2020 included monitoring and evaluation of Kala Azar Elimination Programme in four endemic states (Bihar, Jharkhand, West Bengal and Uttar Pradesh); and developing and testing tools for measuring midwifery competency and undertaking competency assessment of midwifery across Assam and Karnataka.

During the period of 2018-2020, FRHS invested INR about 48 Lac rupees from its own research and development fund to create eLearning module to enhance healthcare providers' competence in infection control, hygiene and sanitation management; to develop a data visualization app, testing utility of mSakhi app for ASHA workers and creating a field practice area in collaboration with Covenant Center for Development (CCD), Tamil Nadu to help FRHS expand its research agenda beyond the constraints of sponsored research FRHS undertakes.

This report presents a brief overview of activities undertaken by FRHS during the financial year 2019-2020; along with a note on sector development in the research areas where FRHS is currently active. The report also covers the Foundation's financial report for 2019-2020.

SECTOR DEVELOPMENT (2015-2020)

Over the past few years; several interest areas for FRHS have seen programmatic changes and other sector development incidents. This section aims to list the major sector updates that influence FRHS' involvement; so FRHS' work can be placed within a national context to help develop a vision of the Foundation's future for it to remain relevant. For example:

Pandemic preparedness in light of COVID-19:

The COVID-19 outbreak was first reported in Nov-Dec 2019, which rapidly evolved as a global pandemic, affecting both High Income and Low-and-Middle Income Countries with equal magnitude. The pandemic preparedness of health systems has since then received focused global attention (WHO, 2020). While large sections of scientists have generated evidence around the microbe, and its pathology, several public health research avenues have also opened up in the field of Pandemic preparedness, like:

A quick review of published articles shows that while the lockdowns have proven an effective strategy to breakdown the spread of infection chain (1), the lockdowns in themselves delayed service seeking for routine/emergency health services for the common public, especially for patients on treatment for chronic debilitating illnesses (2). A working paper by Canadian researchers Brodeur et. al. (2020) studied the google search trends and their association with loneliness, unhappiness and boredom among people under lockdown due to COVID-19, and reported significant surge in numbers of above-mentioned searches indicated severe impact of lockdowns on general public's mental health. A study carried out in Italy reiterated an increased level of stress and anxiety among people under lockdown who reported lack of sleep, decreased quality of sleep, anxiety and depressive symptoms (3).

In case of healthcare providers, the review of studies from HIC and LMIC show that the self-reported mental stress by healthcare providers was proportional to the time they spent among COVID-19 patients: Out of the 14 studies carried out from January- March 2020 in HIC and LMIC, extreme stress was reported by nearly 14.5% of all care providers working with COVID-19. Such healthcare providers were also reported to be at a higher risk of developing anxiety, panic attacks and depression in the studies (4). A UK-based study reported development and evaluation of an e-Package for the use of healthcare providers to mitigate the stress related to managing COVID-19 (5). The package outlines the actions that team leaders can take to provide psychologically safe spaces for staff; promoting self-care strategies like rest, work breaks, sleep, shift work, fatigue, healthy lifestyle behaviour; and managing emotions such as moral injury, coping, guilt, grief, fear, anxiety, depression, preventing burnout and psychological trauma (5). A US study reported using the 'battle buddy' strategy – devised by US army's buddy system – pairing up two healthcare providers as buddies to vent out the stress and anxiety of dealing with COVID-19 (6). It is noteworthy that most of the published studies have reported studies from HIC, and most have reported support strategies for the healthcare workers.

Negligible numbers of ongoing studies are reported for other critical areas for effective pandemic management, such as: the health systems' resilience, preparation of competent Health Workforce to manage pandemics, supply and demand related procedures for drugs and Personal Protective Equipment, tracking and threat assessments using traditional and innovative methods and the impact of a raging pandemic on other regular health services. All these areas have emerged as critical research areas, requiring further research, with opportunities of funding from national development partners, local charity organizations and by state and central government research organizations.

FRHS initiated an online cross-sectional survey amidst healthcare providers working with COVID-19 in Indian public and private sectors with an aim to see the prevalence and level of anxiety and stress and its association with availability of resources and duration of shifts being served by participants. The Survey was launched on 7th April 2020 and has received nearly 660 responses from 16 states and Union Territories in India.

2020-The year of the Nurse and the Midwife:

The WHO called out the national leaders across the globe to invest into development of competent nurses and midwives in their countries. This was in light of the growing evidence that committed, competent midwives are capable of handling all normal pregnancy and births; while they can accurately identify 85% of complications in their early stages and effectively engage with the obstetricians in managing such complication (7,8). Since then several countries – including Nepal, Sri Lanka, Bangladesh and Timor Leste – have launched professional midwifery with promising early results from midwifery-led care interventions. In January 2019, Government of India released its first guideline on establishing midwifery as a profession in India (9). In May 2019, the World Health Assembly declared the year 2019 as the "Year of the Midwives" and the year 2020 as "the Year of the Nurses and Midwives". This has attracted a renewed interest in undertaking research amidst Indian Nurses and Midwives – currently called as nurse-midwives – to benchmark and consolidate their midwifery competencies against international standards issues by International Confederation of Midwives (updated in 2019); and to initiate midwifery-led care interventions in India. Trained Nurses Association of India (TNAI) has initiated discussions on research on nurses: competence, work conditions, care-interventions.

'Respectful maternity care' (RMC) term was coined by WHO in 2010s'; which replaced the more provocative term "disrespect and abuse in maternity care" first reported by the feminist researchers from across the Globe. The RMC has been promoted through several platforms for decades past, but its typology was first described by Bowser and Hill (2010) after a landscape analysis of disrespect and abuse during maternity care reported across the world, from both High and Low-Middle Income Countries. Midwifery is known to follow a woman-centric and respectful maternity care based model, and may be one of the reasons that the Government of India recently formed a technical resource group (TRG) on promoting RMC – including respectful neonatal care – in India along the same time as the launch of National Midwifery Guidelines. The Executive Director of FRHS was part of the TRG that compiled the first draft of National RMC Guidelines.

FRHS has been actively involved in undertaking pioneering research in the field of midwifery since the launch of national midwifery guidelines: FRHS – in collaboration with IIPHG – is leading a study to develop regional tools of assessment of competencies among midwifery educators and clinical midwives in the states of Assam, Gujarat and Karnataka. FRHS received a grant from WHO-SEARO for developing and testing 10 case-vignettes for testing midwifery competence in managing leading causes of maternal and neonatal mortality in South-East Asia, and to modify the self-assessment survey tool developed for Indian midwifery educators and midwives for utilization in all SEAR countries. FRHS was successful in receiving a third grant – as the lead applicant in an Indo-UK collaborative project - for taking forward its midwifery research in 2020-2021, and will continue responding to other upcoming opportunities.

Launch of National Educational Policy (NEP 2020):

The Government of India launched the National Educational Policy (2020) in July 2020 with renewed focus on streamlining and standardizing professional education in India (10). Envisioned as a strategy to achieve the Sustainable Development Goal 4 of "ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all" by 2030, the NEP-2020 has given special attention to a) educational pedagogy; b) preparation of competent teachers at all levels of education; c) promoting academic research through establishment of National Research Foundation; d) improving governance and leadership in Indian Higher Education Institutes; e) improving quality of professional education and online digital education (10). The key changes that pertain to FRHS' focus areas are:

The National Research Foundation will be formed as an independent authority in academic research governed by a board of Governors who are proven research experts of their field. The NRF will coordinate its funding efforts with existing Research Regulatory bodies like DST and ICMR to avoid duplication of efforts, but will offer seed grants and full grants for quality research across all fields including public health (10).

The NEP underlines the need to re-envision the healthcare education, so that the duration, structure, and design of the educational programmes match the role requirements of passing out professionals. Formative and summative assessments will be carried out throughout the course to ensure that the training healthcare professionals are competent to work independently at primary and secondary level hospitals. A greater emphasis has been placed on preventive healthcare and community medicine in all forms of healthcare education and the AYUSH medical systems.

FRHS has an opportunity to support capacity building of healthcare providers and educators from the field of medical and paramedical sciences, especially in developing their research capacities,

eLearning as an effective alternative to traditional educational methods:

The recent rise in epidemics and pandemics across the world and in India highlighted the need to establish a digital alternative of traditional educational methods in times when in-person mode of education is not possible, and this has been stressed in the National Educational Policy (2020) also. The NEP has revealed a gap in existing knowledge in terms of carefully designed and appropriately scaled pilot studies that will be of help in determining the benefits of online teaching methods while revealing the short-comings and recommending mitigation techniques (10).

The NEP focuses on building the capacity building of *Anganwadi* workers as ECCE teachers through a systematic effort in accordance with the curricular/pedagogical framework developed by NCERT. The *Anganwadi* workers will have the opportunity to receive this on-the-job training through an online/digital/distance mode using DTH channels and/or smartphones (10).

The Adult Literacy Programme has also received special attention in NEP 2020, with a vision to promote technology as a means to strengthen and ensure 100% adult literacy. Quality technology-based options for adult learning such as apps, online courses/modules, satellite-based TV channels, online books, and ICT-equipped libraries have been highlighted as the first few focus areas.

The eLearning platform is gaining cognition for making latest knowledge transfer feasible to the health care providers without drawing them away from health care facilities that are acutely short-staffed. A niche has been created for eLearning by Government of India under its "National Mission for Education" (www.sakshat.ac.in). The Government of India has soft-launched its own portal for eLearning; which is currently under development. Till its full-launch, the website hosts selections of eLearning content from development partners such as WHO, UNICEF and UNFPA. The content covers a variety of health conditions and service specialties, such as: Newborn care and care of sick newborn (WHO and/or AIIMS); Addictions and Mental Health (NIMHANS); accreditation courses for health care providers on research methods, health care guidelines by several reputed universities from around the world.

In India, researchers from two medical colleges AIIMS-Raipur and DMIMS-Wardha (2014) developed an eLearning module on pharmacology for 4th year medical students, and their published research is gaining recognition as the benchmark for testing other eLearning modules from different specialties from medical sciences. AIIMS-Delhi has also developed an eLearning module for comprehensive neurosurgery skills training (2016). The Santosh University, Noida has developed a virtual ICU and eLearning tool for trainee and intern physicians (2016). The Jodhpur Institute of Nursing (JINC) has very recently launched online tutorials for nursing students on their eLearning platform. While considerable investigation is being carried out on usefulness, feasibility and utility of electronic media/mobile apps in knowledge translation and its impact on clinical practices; the interventions have, till date, been limited to individual institutes, testing of the tools and publication. There is a wide-open field for establishing collaborations with state governments for establishing intervention testing, accreditation and post-accreditation evaluation for health service improvement in health sector using eLearning strategies.

To this end, the FRHS' Technology-enabled Learning and Skill Development (TeLSD) project has completed

building its first eLearning course on "Hospital hygiene, sanitation and infection control" incorporating the Revised *Kayakalp* guidelines from Government of India and from WHO, and the product is now ready for its roll-out for health facility based medical and paramedical staff s and for assessing the impact of this eLearning strategy on knowledge and practices.

mHealth initiatives

In the field of health services too, several *mHealth initiatives* have been launched by the Government of India under its Digital India initiative; with several end-user apps launched in past years, such as mDiabetes (2015); *No More Tension* (2016); *India Fights Dengue* (2016); *NHP Swasth Bharat* (2016). The 'Vaccine Tracker' app was launched (2016) by GoI under *Indradhanush* immunization scheme for parents to track and remember essential immunization for their children. Similar apps have also been launched for the health workforce to aid them in undertaking their activities systematically: The *Aide Memoire* (2015-2016) is a smart phone app for ASHAs and ANMs to promote prompt services to Pregnancy, Childbirth and Postpartum care. *The Mother and Child Tracking System* is a mobile app for the community-level health care providers to track pregnant/postnatal women and under-5 children in their designated areas The '*Kilkari*' initiative – accessed by more than 7 crore people from 11 Indian states – comprises of 72 free weekly and time-appropriate audio messages on pregnancy, childbirth and newborn care; through calling a toll free number '*Nikshay*' is an initiative based on missed-call call-center, which has been implemented across all Indian states and Union Territories for monitoring, counselling and providing treatment support to TB patients. Approximately 85 lakh patients have been registered under this initiative.

While the apps developed by individual institutions are being tested for their impact on access to health information, the apps made available by the GoI seem to be unregulated in terms of their effectiveness in improving access to health information. This interpretation is drawn because the relevant websites of ministry of health and family welfare, Government of India merely list the numbers of time a particular app is downloaded (in millions); but no information can be found about how the app is being used, primary beneficiaries and how the information gained impacts the health seeking behaviour. This knowledge gap provides some research opportunities which could be considered by FRHS. The DRISHTI app; and the m*Mitra* and mCheck interventions developed by FRHS are strong first steps, and other such interventions could be further conceptualized.

In 2019-2020, FRHS has supported maintenance and field-testing of the mSakhi app for ASHA workers. Originally developed by IntraHealth, the App is now freely available in public domain and can be adapted and re-purposed for varied health scenarios including pandemic preparedness.

Empirical evidence generation around AYUSH medicine:

Universal Health Coverage (UHC) in the Indian context is understood as easily accessible and affordable health services for all citizens. The Planning Commission of India constituted a High-Level Expert Group (HLEG) in October 2010 for the purpose of drafting the guidelines of UHC. The primary focus of UHC is to provide a financial protection against non-essential expenditures to all citizens seeking health services. An adequate health infrastructure, skilled health human resources, and access to affordable drugs and technologies are required so that all people receive the level and quality of care they are entitled to in a socio-culturally appropriate manner. Department Health and family welfare launched AYUSH (*Ayurveda, Yoga, Unani, Siddha and Homeopathy*) in 2003 under National Health Mission (then, National Rural Health Mission) as an alternative to the allopathic health care system, and though the AYUSH system is not equipped to handle cases of acute medical and surgical emergency, it has solutions for most health problems, including treatment of life-style related and non-communicable diseases.

For example, an *Ayurvedic* herbal-mineral preparation, named *Punarnavadi Mandura* treats anaemia, and has been added in the drug kit of accredited social health activists (ASHAs) working in Kerala. A report by the chief of technical services at the *Arya Vaidya Sala*, Kottakkal, Kerala, estimates that the cost of *Ayurvedic* treatment for a

minor ailment, such as the common cold or a stomach upset, would be INR 50–100; whereas a major ailment requiring a couple of months' treatment could cost around 500 INR: significantly cheaper than the allopathic treatment.

Non-Governmental Organizations working with alternative medicines also engage in research to identify indigenous medicines as alternatives to allopathic medicines. FRHS has previously supported projects promoting indigenous medicine and can still make considerable contribution; including conduction of research on health and wellness, identifying practices that restore the wellness balance and improve quality of life.

Foundation for Research in Health Systems

Annual Activity Report April 2019- March 2020



Foundation for Research in Health Systems Bangalore Office:G-1, Brigade Business Suites, 44, T. Mariappa Road, 100 ft Road, Near Ashoka Pillar, Jayanagar 2ndBlock, Bangalore-560011,Phone-080- 26577978 E-mail: admin@frhsindia.org Website:www.frhsindia.org

BACKGROUND

The Foundation for Research in Health Systems (FRHS) was founded in 1989 as a not-for-profit organization with an aim to find ways for a healthier nation through research, innovation and interventions. FRHS' mission is to combine research with practice to make health research relevant to health workers, programme managers and policy makers. FRHS' research and intervention areas include Information Communication Technology (ICT) solutions, decentralized planning, evaluation, community monitoring, and health management information systems.

FRHS predominantly works in the areas of maternal health, adolescent health, child health and nutrition, reproductive health, family planning and prevention of HIV/AIDS. In these areas, FRHS focuses on programme planning to strengthen existing systems; carrying out monitoring and evaluation; and programme/policy evaluation, and has received funding support from organizations such as Welcome Trust, Rockefeller Foundation, CARE, DFID, UNICEF, ICICI Social Initiative Group; Deepak Charitable Trust, and ICRW.

Intervention research is another of FRHS' focus areas, specifically in designing and implementing Health Management Information System (HMIS) and to use the HMIS data to reach out to the target beneficiaries and to build capacities of programme managers in making service delivery, efficient and effective.

Table 1 presents a brief overview of all projects active in the financial year 2019-2020. The projects are divided into three groups based on nature of funding:

- I. Projects with FC (External) funding
- II. Projects with Indian (External) funding
- III. Projects funded by FRHS (Internal)

		Report of	I /ICCIVICI	es anu Resea	l en i rojeets	Duius.			
Sr. No	Project Title	Period	Budget (in Lacs)	Sponsor	Location	Key Staff involved	Status		
	I. Projects with FC (External) Funding								
1	Strengthening the monitoring and review mechanism and building M&E capacity of the National Vector Borne Disease Control Program through secondment of M&E Officers.	Mar - Jul 2019	110.6	BMGF	New Delhi, Bihar, Jharkhand , Uttar Pradesh and West Bengal	Dr. Preeti Kumar Dr. Nirmala Murthy Dr. M Prakash Dr. Paridhi Jha	Completed		
Con Stree	Description of the Project: FRHS provided techno-managerial support to the National Vector Borne Disease Control Program (NVBDCP), Ministry of Health, Government of India, in three key components (i) Strengthening of M&E in the four endemic states, and (ii) Capacity Building of health care personnel in in early case detection, prompt referral, diagnosis and treatment support through the KalaCORE programme.								
		II. Pı	ojecis wi	ith Indian (E	xternal) Fur	laing			
Sr. No	Project Title	Period	Budg et (in Lacs)	Sponsor	Location	Key Staff involved	Status		
2	Health Needs Assessment (HNA) for Integrated Health Care Delivery Model in Majuli, Assam	Mar 2019 to May 2019	10.9	Piramal Swasthya	Assam	Dr. Nirmala Murthy Mr. Chayan Roy Choudhury	Completed		
Description of the Project: This health needs assessment study in Majuli district of Assam was carried out to guide the development of an Integrated Health Care Delivery model (IHCD) being initiated by Piramal Swasthya in 100 villages, with the goal of reducing maternal and infant mortality as well as premature mortality due to Hypertension and Diabetes, through early detection, treatment and referral services.									
3	To develop regional competency assessment tools for midwifery educators and providers and assess their competencies using the tools developed	Nov- Dec 2019	15.0	WHO- SEARO	Banglades h	Dr.Paridhi Jha	Completed		

Table 1: Report on Activities and Research Projects' Status:

Description of the Project: This project developed and validated case-vignettes and scoring format for top five maternal mortality and top five neonatal mortality causes in South-East Asia Region as well as modified and translated the self-assessment questionnaires for assessing midwifery competence among midwifery educators and professional midwives, and tested its regional adaptation for comprehensiveness and applicability.

4	End-line Evaluation of "Comprehensive Diabetes Management in Assam	May - Jun 2019	2.7	Piramal Swasthya		Mr.Deep Jyoti Kalita Mr.Gaurav Sharma	Completed
---	---	-------------------	-----	---------------------	--	--	-----------

Description of the Project: Piramal Swasthya Management and Research Institute (PSMRI)' *Sanjeevani* Village Health Outreach Program, initiated in 2011, covering 3744 villages in 27 districts of Assam, included a component of diabetes awareness, prevention and management program, with funding from the World Diabetes Foundation (WDF). This program aimed at helping people, especially the rural poor, to prevent diabetes by creating awareness about the disease, the required lifestyles changes and providing screening and treatment facilities near their homes. FRHS carried out the impact evaluation of this program in terms of diabetes awareness levels, practice of healthy lifestyles and the control of sugar level among patients, as compared with the baseline survey.

	(1		1
5	Competency assessments for midwifery skills of providers and tutors, and barriers and facilitators in providing quality midwifery services in India.	Apr 2019 - Sep 2020	84.0	WHO India Office	Karnataka & Assam	Dr. Paridhi Jha Mr. Deep Jyoti Kalita Ms. Lydia S. Ms. Nivedita L. Ms. Anne P. Rani	Ongoing

Description of the Project: A study undertaken to form the roadmap for implementation of national midwifery guidelines (2019). The study has developed and validated questionnaires for measuring midwifery competencies of clinical midwifes (practitioners) and midwifery teaching competence of midwifery educators in public and private sectors in collaboration with IIPHG, MAMTA HIMC and WHO HQ researchers. FRHS is using the tools in Assam and Karnataka whereas its partners IIPHG is leading the study in Gujarat and MAMTA-HIMC is leading the study in Bihar UP and Telangana. Data collection in six states is complete, with responses from Midwifery Educators (n=2016), Clinical Midwives (n=2296), and ANMs (n=1137).

III. Projects with FRHS (Internal) Funding							
Sr. No	Project Title	Period	Budget (in Lacs)	Sponsor	Location	Key Staff involved	Status
1	SurveyVis: A Visual Analytic Tool for	Apr 2017	12.2	FRHS	D T 11	Mr. Gaurav Sharma	Ongoing

Household Survey Data	toDec2 019		Dr. Nirmala Murthy	

Description of the Project: In collaboration with IIIT Bangalore (IIITB), FRHS developed an analytical tool, called SurveyVis, that can be used to visualize raw-data obtained from any surveys. The tool has a stand-alone desktop version and a web-based version that connects directly with the database. The tool also has the capability of presenting the surveys data over time, by location and by value range. The product was tested for flexibility in visual analytics by subjecting it to datasets from evaluation of mMitra app, evaluation of the diabetes management program in Assam, and a dataset on women's satisfaction with childbirth services. The tool can handle different types of data sets typically use in surveys such as numeric data, alpha-numeric data, single/multiple choice responses. The tool has been found to help researchers/program managers understand the entire raw data better than what they can learn from standard statistical analysis.

2	Technology-enabled Learning and Skill Development Initiative	Nov 2017 to Dec 2019	35.00	FRHS	Pan-India, being tested in Karnataka	Dr. G.L. Shekar Dr. Nirmala Murthy Dr. Paridhi Jha Ms. Anne P. Rani Ms. Nivedita L.	Ongoing
---	--	-------------------------------	-------	------	---	---	---------

Description of the Project: In collaboration with Excelsoft Technologies, Mysore, FRHS developed a 10hours long eLearning programme which contains six modules on maintaining Hospital Sanitation, Hygiene and Infection Control. The modules combine WHO guidelines, *Kayakalp* Guidelines and LaQshya Guidelines. It is a learning method for on-the-job skill development among healthcare providers including nurses, midwives, physicians, lab technicians, and hospital sanitation and housekeeping personnel. The modules could be taken independently or as a comprehensive course intended for nurses, midwives, physicians and hospital supervisors. The course was pilot tested on nursing interns from a reputed college of nursing in Bengaluru, and was soft-launched to selected private health facilities across Karnataka for assessment of the programme utility by independent learners.

3	FRHS Programme- development Initiative: utilizing mSakhi App in Jharkhand and Bihar by ASHA workers	Dec 2018 to Aug 2020	20.00	FRHS	Bihar,	Dr. Meenakshi Jain Dr. Nirmala Murthy	Ongoing
---	---	-------------------------------	-------	------	--------	--	---------

Description of the Project: FRHS funded documenting effectiveness of mSakhi app – meant for assisting ASHAs during field work – and promoting its adoption in the state governments of Uttarakhand, Bihar and Jharkhand. The project team demonstrated App effectiveness in Uttarakhand though the state government chose to adopt GOI promoted app, while the State Government of Bihar invited FRHS to demonstrate the app in Sitamarhi district. The Bihar initiative was stalled because of Covid-19 pandemic but is expected to resume sometime in September.

4	Implementing community-based interventions to improve the health and nutrition among children and adolescents in selected communities district	Nov 2019 to Oct 2020	10.00	FRHS	Tamil Nadu	Dr. Nirmala Murthy Dr. Paridhi Jha	Ongoing
	blocks of Tamil Nadu						

Description of the Project: The Covenant Centre for Development (CCD), a not-for-profit development organization, promoted in 1989, works for bringing socio-economic development among the vulnerable and poor people living in the drought prone areas of 9 districts in Tamil Nadu, who are highly dependent on seasonal rains. Typically, people in these areas are employed for three to four months in a year and in the remaining part of the year, they are forced to migrate to nearby cities and towns in search of livelihood opportunities. FRHS is collaborating with CCD to test efficacy of using CCD field areas as possible FRHS research interventions testing sites in future, while working with CCD for bringing out scientific publications from the data generated through project-fund utilization.

The project activities would be centered on the following components to achieve project goals: a) Promotion of village and block level health governance; b) Creating access to health services; c) Integration of AYUSH referral system and d) food-based health improvement. Work on this project is slightly delayed due to the COVID-19 situation.

CURRENT MEMBERSHIP: RESEARCH ADVISORY BOARD, FRHS

FRHS' Research Advisory Board was formed in Dec 2018, in line with the requirements for getting licensure from Department of Scientific and Industrial Research (DSIR), New Delhi. Eminent researchers from public health, theological representative and a lay-person representing the community were invited. The current list of RAB members – four external and two internal – is shared below:

Name	Designation	Internal/Extern al	Email Address	Contact Number
Dr. N Girish	Professor of Epidemiology, Centre for Public Health, NIMHANS	External (Chairperson)	girishn@nimhans.ac.i n	9341226277
Dr. Hemanth Apte	Anthropologist, Independent Consultant	External (Member)	hamapte@gmail.com	020- 25561158
Dr. Nirmala Murthy	Founder, Foundation for Research in Health Systems	Internal (Member)	murthy.nirmala@gm ail.com	080-26720135 26723937(O)
Dr.Padma Venkat	Dean, Public Health, SRM University	External (Member)	padmavenkatl@gmai l.com	9482582825
Dr. Biju KC	Professor, Department of Media, Christ University	External (Member)	fr.biju@christunivers ity.in	9742704212
Dr. Paridhi Jha	Executive Director- FRHS	Internal (Member)	paridhijha@frhsindia. org	8349192280

CURRENT MEMBERSHIP: ETHICAL REVIEW BOARD, FRHS

The Institutional Review Board of FRHS reviewed and approved all research projects undertaken by the Foundation during 2019-2020. The present ERB is formed by following research experts:

Name	Email	Title	Location	Phone
Dr. Hemant Apte	hamapte@gmail.com	Chairman	Pune	09422512256
Dr. D.K.Srinivas	drdks9@gmail.com	Member	Bangalore	9480494245
Ms. Sanghamitra Iyengar	sanghamitra.iyengar@gmail.c om	Member	Bangalore	080-26605161
Ms. Aparna Ravi	aparna.ravi@clpr.org.in	Member	Bangalore	09986022206
Dr. Vijay Gopichandran	<u>vijay.gopichandran@gmail.co</u> <u>m</u>	Member	Chennai	09445226806
Ms. Vani Lakshman	vanilman@gmail.com	Member	Bangalore	09902029891
Dr. Nirmala Murthy	murthy.nirmala@gmail.com	Member	Bangalore	09448116094

FRHS PUBLICATIONS: 2019-2020

Published Research Articles:

- <u>Murthy</u> N, Chandrasekharan S, Prakash MP, Kaonga NN, Peter J, Ganju A, et al. The Impact of an mHealth Voice Message Service (mMitra) on Infant Care Knowledge, and Practices Among Low-Income Women in India: Findings from a Pseudo-Randomized Controlled Trial. Matern Child Health J [Internet]. 2019;23(12):1658–69. Available from: <u>https://doi.org/10.1007/s10995-019-02805-5</u>
- <u>Jha P</u>, Larsson M, Christensson K, Skoog A. Evaluation of the psychometric properties of Hindi translated Scale for Measuring Maternal Satisfaction among postnatal women in. PLoS One [Internet]. 2019;14(1):1–17. Available from: <u>https://www.ncbi.nlm.nih.gov/pubmed/30695046</u>

Submitted Manuscripts:

- Jha P, Christensson K, Larsson M, Sharma B, Skoog Svanberg A, Johansson E. The Balancing Act: Experiences of nurse-midwives working in labour rooms of public health facilities in Chhattisgarh, India.
- Jha P, Christensson K, Larsson M, Sharma B, Skoog Svanberg A, Johansson E. A nurse-midwife stands alone: Resilience among indian nurse-midwives working in labour rooms of public health facilities in Chhattisgarh, India.

Project Reports:

Developing and testing case-vignettes as effective tools of competency assessments among professional midwives and midwifery educators of Bangladesh: A project report.

Health Need Assessment of village communities of Majuli District, Assam.

Health seeking behaviour among the diabetic patients of Majuli District, Assam.

Manual/training material/module development

Training Manual: preparing project staff in conducting cross-sectional survey, non-participatory direct observations, vignette-based interviews and in-depth interviews for holistic assessment of midwifery competencies.

Digitization of FRHS' Health Monitor (2020)

FRHS STAFF MEMBERS: As on MARCH 2020

Name	Email	Designation	Location	Phone
Dr. Paridhi Jha	paridhijha@frhsindia.org	Executive Director	Bangalore	8349192280
Mr. Gaurav Sharma	gsharma@frhsindia.org	Senior Technical Officer	New Delhi	9358079432
Mr. Deep Jyoti Kalita	dkalita@frhsindia.org	Research Officer	Bangalore	9085725110
Ms. Laimayum Nivedita Devi	ditanive5@gmail.com	Research Associate	Bangalore	7005717523
Ms. Sandhya Savanth	accounts@frhsindia.org	Finance Officer	Bangalore	9538608808
Ms. Lali L.B	admin@frhsindia.org	Administrative Officer	Bangalore	9945108333
Mr. Chethan S	chetan.frhsindia@gmail.co m	Office Assistant	Bangalore	9008488938
Mr. Devram Shrimali*	-	Peon- Ahmedabad	Ahmedabad	8153037056
Kemparase Gowda	kemparasegowda17@gmail.c om	Office Assistant	Bangalore	9901942483
Manjunath B. K.	manjunathbk137@gmail.co m	Driver	Bangalore	9901503132

*Mr. Devram Shrimali passed away from natural causes in May 2019. Mr. Shrimali had been one of the oldest FRHS Employees and was respected for his promptness in completing assigned tasks, his thoroughness and dedication towards work. FRHS Team pays our respect to Mr. Devram Shrimali.

FRHS INTERNS 2019-20:

FRHS accepted internship requests from five interns – four women and one man, all pursuing masters of public health with basic professional education in Dental Medicine and Occupation Therapy. The interns were shortlisted out of 16 applications received, based on their Masters' thesis focus area, credentials, and performance during one-on-one interview. The table below presents the list of FRHS interns during 2019-2020.

Name	Email	Location	Phone
Dr. L. Nivedita Devi	ditanive5@gmail.com	Bangalore	7005717523
Dr. Judy Angel	judyangel223@gmail.com	Bangalore	09600139669
Ms. Swyetha	sweytha.07@gmail.com	Bangalore	09176336324
Dr. Poorna Chandra Sahoo	drsahoopc@gmail.com	Bangalore	06360938317
Dr. Sanjana P	dr.sanjana2211@gmail.com	Bangalore	08939713406

PROJECT STAFF 2019-20:

Name	Period (From- to)	Designation	Location	Contact details	Remarks
Dr. Bassu Patil	9 th Nov 2019 to 8 th Jan 2020	State Coordinator	Karnataka	patil.basva@gmail.co m	Technical staff
Ms. Jismimol VJ	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	jismimol.vj15@gmail .com	Technical staff
Ms. Anu Thomas	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	anuthomasamal@gm ail.com	Technical staff
Ms.Honey Maria Jose	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	honeyvattappallil@g mail.com	Technical staff
Ms.Vismaya C	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	<u>vismayanipabi95@g</u> mail.com	Technical staff
Ms. Poornima C.G	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	poornigowda22@gm ail.com	Technical staff
Ms.Geetha N	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	geethagowda495@g mail.com	Technical staff

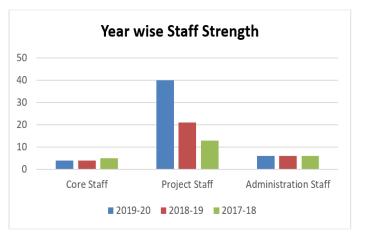
Name	Period (From- to)	Designation	Location	Contact details	Remarks
Ms.Jaisy Joy	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	jaisyjoy@gmail.com	Technical staff
Mr.Shiv Prasad J	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	shivaprasadamblimat h@gmail.com	Technical staff
Mr.Sagar	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	sagisagar17@gmail.c om	Technical staff
Ms.Deepa C	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	vasideepa5@gmail.c om	Technical staff
Ms.Riju Tiwari	9 th Nov 2019 to 8 th Jan 2020	Research Investigator	Karnataka	tiwaririju@gmail.co m	Technical staff
Mr.Akasha N.K	23 rd Feb 2020 to 23 rd Mar 2020	Research Investigator	Karnataka	aaki1998nk@gmail.c om	Technical staff
Mr.Akhith Kumar R	23 rd Feb 2020 to 23 rd Mar 2020	Research Investigator	Karnataka	akhithr.ar@gmail.co m	Technical staff
Ms.AmitaM.Albal	23 rd Feb 2020 to 23 rd Mar 2020	Research Investigator	Karnataka	amitamj01@gmail.co m	Technical staff
Mr.Devaraju	23 rd Feb 2020 to 23 rd Mar 2020	Research Investigator	Karnataka	devarajudevaraju456 @gmail.com	Technical staff
Ms.Navya M.P	23 rd Feb 2020 to 23 rd Mar 2020	Research Investigator	Karnataka	navyamp1995@gmai <u>l.com</u>	Technical staff
Ms. Rashmi K.S	23 rd Feb 2020 to 23 rd Mar 2020	Research Investigator	Karnataka	rashmisuma123@gm ail.com	Technical staff
Ms. Anne Praveena Rani	1 st Aug 2018 to 7 th June 2019	Research Associate	Karnataka	08754712388	Technical Staff
Ms. Daisy Kalita	1 st Nov 2019 to 31 st Dec 2019	Research Investigator	Assam	daizykalita201@gm ail.com	Technical staff
Ms.HimakhySaikia	9 th Nov 2019 to 31 st Dec 2019	Research Investigator	Assam	dimpisaikia72@gma il.com	Technical staff

Name	Period (From- to)	Designation	Location	Contact details	Remarks
Mr. Himanka Deka	1 st Nov 2019 to 31 st Dec 2019	Research Investigator	Assam	himanka.deka@gma il.com	Technical staff
Ms. Liza Saikia	1 st Nov 2019 to 31 st Dec 2019	Research Investigator	Assam	lizasaikia91@gmail. com	Technical staff
Ms. Mrigatrishna Das	1 st Nov 2019 to 31 st Dec 2019	Research Investigator	Assam	mrigatrishnadas@gm <u>ail.com</u>	Technical staff
Ms. Pampi Kalita	1 st Nov 2019 to 31 st Dec 2019	Research Investigator	Assam	kalitapampi917@gm ail.com	Technical staff
Ms. Lydia S	1 st Nov 2019 to 31 st Dec 2019	Consultant	Bangalore	7625017613	Technical staff
Dr. Meenakshi Jain	19 th Jan 2019	Advisor & Team Leader		09971755334	Technical staff
Mr. Prabhakar Kumar Sinha	1 st Dec 2018 to 31 st March 2019	Senior Advisor, FRHS Program Development initiative	Bihar, Jharkhand	08340295542	Technical Staff
Mr. ArunanandMurmu	1 st Jan 2019 to 31 st March 2019	Consultant,	Uttarakhand	09713737650	Technical Staff
Mr. Akbar Ali Khan	1 st Jan 2019 to 31 st March 2019	Consultant	Uttarakhand	9452323789	Technical Staff
Mr. Gyanendra Mishra	20 th Aug 2019 to 19 th Feb 2020	Project Coordinator	Sitamarhi, Bihar	7406777377	Technical Staff
Randhir Kumar	17 th Mar 2020 to 30 th July 2020	Project Coordinator	Sitamarhi, Bihar	9576449071	Technical Staff
Dr. Achintya Srivatsa		National M&E Officer	New Delhi	achintya.srivatsa @frhsindia.org	Technical staff
Dr. Akhilesh Patel	16 th Mar 2019 to 30 th June 2019	The Consultant- State M&E Officer	UttarPradesh	akhilesh.patel@ frhsindia.org	Technical staff

Name	Period (From- to)	Designation	Location	Contact details	Remarks
Dr.AmlanDatta	16 th Mar 2019 to 30 th June 2019	The Consultant- State M&E Officer	West Bengal	09932114617, Amlan.datta@frhsind <u>ia.org</u>	Technical Staff
Dr. Preeti Kumar	16 th March 2019 to 15 th July 2019	Project Lead	New Delhi	<u>preeti.kumar@frhsin</u> dia.org	Technical Staff
Dr. Pankaj Kumar	16 th Mar 2019 to 30 th June 2019		Jharkhand	Pankaj.kumar@ frhsindia.org	Technical Staff
Dr. VikasKanthawal	16 th Mar 2019 to 12 th June 2019	The Consultant- State M&E Officer	Jharkhand	Vikas.kanthwal @frhsindia.org	Technical Staff
Dr. GaurabMitra	16 th Mar 2019 to 30 th June 2019		Bihar	gaurabmitra@fr hsindia.org	Technical Staff
Mr. Philip N Kumar	16 th March 2019 to 15 th July 2019	The Consultant- Project Director	New Delhi	9701222352 Philip_kumar@frhsin dia.org	Technical Staff
Ms. Mitali Deka	16 th March 2019 to 15 th July 2019	The Consultant- Sr. Finance & Admin Manager	New Delhi	09999194888	Admin Staff

YEAR-WISE STAFF STRENGTH (As on March 31st 2020, 2019 and 2018)

Year wise Staff Strength						
Year	Cor e Staff	Projec t Staff	Admin i stratio n Staff	Total		
2019-20	4	40	6	50		
2018-19	4	21	6	31		
2017-18	5	13	6	24		

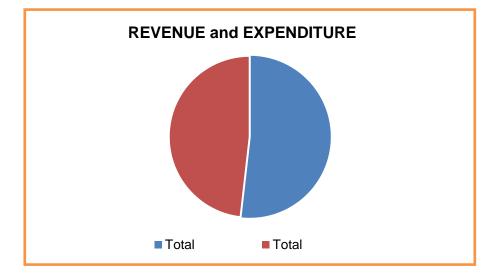


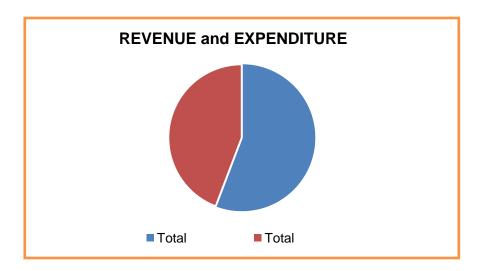
YEAR-WISE INCOME AND EXPENDITURE STATUS (As on March 31st 2020, 2019 and 2018)

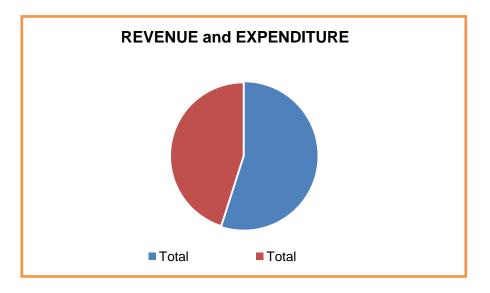
The provisional financial audit report for the year 2019-2020 is attached with this report. The financial trends of FRHS over the past three financial years (2017-18; 2018-2019; and 2019-20) follow:

Revenue (in lakhs)	2017-18	2018-2019	2019-20
Receipts from projects	209.63	51.20	131.92
Interest income	13.45	16.22	10.00
Miscellaneous income	0.43	-	1.69
Total Revenue	223.52	67.42	143.61
Total Expenses	240.27	85.05	175.10
Excess of Income over Expenditure	-17.1	-17.87	-31.90
Reserves and Surplus at the beginning of the year	272.28	255.33	237.46
Reserves and Surplus at the end of the year	255.33	237.46	205.55

ASSET COMPOSITION (2017-2020)







CONCLUSION

While FRHS has been able to sustain regular and diverse research activities in the year 2019-2020; there is a need to expand the network building and undertaking innovative research in the coming years to continue its long term legacy. Foundation is strengthening its protocol for evaluating and benchmarking institutional effectiveness. This will provide an analytical visibility of the path FRHS is taking towards meeting its vision and mission.

The major projects by the Foundation fall within the scope of work outlined in the institutional objectives. Moving forward, FRHS will also develop processes which measure FRHS' effectiveness that can be the foundation for developing short and long-term action plans to sustain FRHS as a pioneer public health and informatics research institute. **FRHS** Offices

Delhi Registered Office: Room No. 1, 214, Syndicate House, Inderlok, Delhi – 35

BangaloreOffice:

G-1, Brigade Business Suites, 44, T. Mariappa Road, 100 ft Road, Near Ashoka Pillar, Jayanagar 2ndBlock, Bangalore-560011 Phone-080- 26577978; E-mail: admin@frhsindia.org